

Mineral Industry Surveys

For information, contact:

James F. Carlin, Jr., Acting Bismuth Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4985, Fax: (703) 648-7757

E-mail: jcarlin@usgs.gov

Robin C. Kaiser (Data) Telephone: (703) 648-7948 Fax: (703) 648-7792 E-mail: rkaiser@usgs.gov

Internet: http://minerals.usgs.gov/minerals

BISMUTH IN THE SECOND QUARTER 2006

Total bismuth consumption in the United States for the second quarter of 2006 was 598 metric tons (t), which was about 2% above that in the second quarter of 2005, according to estimates compiled by the U.S. Geological Survey. The estimated consumption breakdown for bismuth in the second quarter was about 45% for metallurgical additives and galvanizing; 37% for fusible alloys, solders, and ammunition; 16% for chemical and pharmaceutical uses; and 2% for other uses (table 2). Bismuth imports for the first 5 months of 2006 declined by 18% from those in the comparable period of 2005.

The New York dealer price for bismuth, as published in Platts Metals Week, started the month of April at \$4.45 to \$4.70 per pound and drifted somewhat lower during the second quarter, ending June at \$4.20 to \$4.50 per pound.

China's leading bismuth producer, Hunan Shizhuyuan Non-Ferrous Metals Co., announced that it would increase its bismuth concentrate capacity by 80% to 100% when it brings a new concentrator online in October 2006. Construction of the 24,000-metric-ton-per-year concentrator at the firm's Chenzhou Works in Hunan Province started in late 2005. Work on the project has cut the company's current bismuth output an average of 10% to 20% owing to its impact on the existing concentrator (Metal Bulletin, 2006).

Reference Cited

Metal Bulletin, 2006, Shizhuyuan to double bismuth concs capacity: Metal Bulletin, no. 8947, June 5, p. 14.

$\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT BISMUTH STATISTICS}^1$

(Kilograms unless otherwise specified)

		2006		
	2005	First quarter	Second quarter	
Consumption	2,280,000	521,000 ^r	598,000	
Exports ²	142,000	37,400	19,600 ³	
Imports for consumption	2,530,000	483,000	399,000 3	
Price per pound, dealer, average of period	\$3.91	\$4.70	\$4.50	
Stocks, end of period, consumer	134,000	129,000	118,000	

rRevised.

$\label{eq:table 2} \textbf{ESTIMATED BISMUTH METAL CONSUMED} \\ \textbf{IN THE UNITED STATES, BY USE}^1$

(Kilograms)

		2006		
Use	2005	First quarter	Second quarter	
Chemicals ²	500,000	83,500 ^r	95,700	
Bismuth alloys	669,000	158,000 ^r	223,000	
Metallurgical additives	1,090,000	270,000	270,000	
Other	15,700	8,240 ^r	10,200	
Total	2,270,000	521,000 ^r	598,000	

rRevised

¹Data are rounded to no more than three significant digits.

²Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

³Import and export data for June 2006 were not available at time of publication.

¹Data are rounded to no more than three significant digits, may not add totals shown.

²Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

 $\label{eq:table 3} \textbf{U.S. EXPORTS OF BISMUTH METAL, ALLOYS AND WASTE AND SCRAP, BY COUNTRY}^1$

(Kilograms, metal content)

		2006					
	_		First			January-	
Country	2005	March	quarter	April	May	May	
Argentina	240	15	15			15	
Belgium	17,000						
Brazil	4,260	20	20			20	
Canada	70,100	10,100	19,800	1,300	3,680	24,700	
Chile	1,560		916			916	
China	35						
Colombia	39						
Dominican Republic	5,420	6,440	12,500	1,170	13,100	26,800	
France	10,100						
Germany				112		112	
Hong Kong	234						
India	2,000		22			22	
Ireland	618						
Italy	50						
Japan	2,100		2,020			2,020	
Korea, Republic of	293		159			159	
Malaysia	11						
Mexico	17,400		1,180	82	107	1,370	
Saudi Arabia			50			50	
Singapore	160						
South Africa	98						
Spain	1,000						
Taiwan	49						
United Kingdom	8,840	728	728			728	
Total	142,000	17,300	37,400	2,670	16,900	56,900	

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $\label{eq:table 4} \textbf{U.s. IMPORTS FOR CONSUMPTION OF BISMUTH METAL, BY COUNTRY}^1$

(Kilograms)

		2006				
		First			January-	
Country	2005	March	quarter	April	May	May
Bahamas, The	2,620	527	527	553		1,080
Belgium	1,050,000	75,700	177,000	72,500	132,000	382,000
Canada	7,370		778		1,440	2,220
China	667,000		28,700	1,000	40,000	69,700
France			3			3
Germany	18,500		20			20
Hong Kong		18,200	36,500			36,500
Italy	106	300	300			300
Mexico	480,000	40,000	148,000	40,000	60,000	248,000
Netherlands	4		6			6
Spain	700		600		600	1,200
United Kingdom	304,000	51,100	90,600	24,600	25,500	141,000
Total	2,530,000	186,000	483,000	139,000	260,000	882,000

⁻⁻ Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

¹Data are rounded to no more than three significant digits; may not add to totals shown.